

## Internet-Based HIV/STI Prevention Programs for Adolescents



**August 21, 2008**

Presented by:



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## Disclosure Statement

CDC, our planners, and our presenters wish to disclose they have no financial interest or other relationships with the manufacturers of commercial products, suppliers of commercial services, or commercial supporters. Presentations will not include any discussion of the unlabeled use of a product or a product under investigational use.

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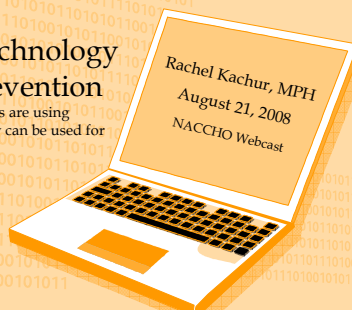
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## Adolescents, Technology & STD/HIV Prevention

An overview of how adolescents are using technology and how technology can be used for STD/HIV prevention



*The findings and conclusions in this presentation are those of the author(s) and do not necessarily represent the views of the Centers for Disease Control and Prevention.*

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## Outline

- Youth & Sex
  - Sexual debut, oral sex, STDs, HIV
- Youth & Technology
  - What they use, how & why
- Technology & Prevention
  - How technology is currently being used for STD/HIV prevention

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## A graphic illustration of a laptop computer. The screen displays the text "Kids are sexually active" in a black, sans-serif font. The laptop is white with a black keyboard and a yellow trackpad. The background is a light yellow color with a pattern of binary code (0s and 1s) in a darker yellow. A solid yellow horizontal bar is positioned above the laptop. The overall style is simple and illustrative.

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## Youth Risk Behavior Surveillance United States, 2007

- 47.8% of high school students had ever had sexual intercourse; 35% are currently sexually active

	<u>Female</u>	<u>Male</u>
Age (years)		
15-17	30.3%	31.3%
18-19	68.8%	64.3%
20-24	91.3%	91.0%

- 14.9% of students had had sexual intercourse with >4 persons during their life
- 61.5% report using a condom at last intercourse
- 38.5% of sexually active high school students had not used a condom at last sexual intercourse

- NSFG, 2002

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National Survey of Family Growth  
2002 (Cycle 6) – Oral Sex

- 30% of 15 yo report experiencing oral sex
- 75% of 19 yo report experiencing oral sex
- At every age, a higher % of youth report oral sexual than coital experience

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Sexually Transmitted Diseases

- 1 in 4 female adolescents have an STI; 15% had more than one
  - HPV (18.3%)
  - Chlamydia (3.9%)
  - Trichomoniasis (2.5%)
  - HSV-2 (1.9%)
- African Americans females have highest prevalence (48% compared to 20% of white females)

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CDC STD surveillance report, 2006

- ~ 19 million new infections occur each year, almost half of them among young people ages 15 to 24
- Chlamydia is the most common reportable STD.
- Young females aged 15 to 19 had the highest chlamydia rate.
- For the second consecutive year, gonorrhea rates for persons 15 to 19 and 20 to 24 years of age increased.

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## CDC STD surveillance report, 2006

- Syphilis rates among 15 – 19 yo women have increased since 2004 (1.5 cases per 100,000 population, to 1.9 in 2005 and to 2.3 in 2006)
- For women, rates are highest among 20 – 24 yo (2.9 cases per 100,000 population in 2006)
- In men, rates among those 15 to 19 years of age have increased since 2002 (1.3 cases per 100,000 population in 2002 to 2.3 in 2005 and 3.1 in 2006)

## HIV

### Estimated Rates of New Human Immunodeficiency Virus Infections, 50 US States and the District of Columbia, 2006<sup>a</sup>

**Table 2.** Estimated Rates of New Human Immunodeficiency Virus Infections, 50 US States and the District of Columbia, 2006<sup>a</sup>

Characteristic	Rate (95% CI) <sup>b</sup>
Total	22.8 (19.5-26.1)
Sex	
Male	34.3 (29.1-39.5)
Female	11.9 (10.0-13.7)
Race/ethnicity	
White	11.5 (9.6-13.4)
Black	83.7 (70.9-96.5)
Hispanic	29.3 (23.8-35.0)
Asian/Pacific Islander	10.3 (4.2-16.3)
American Indian/Alaska Native	14.6 (3.0-25.2)
Age	
13-29	26.8 (22.8-31.0)
30-39	42.8 (35.7-49.4)
40-49	30.7 (25.8-35.6)
50-99	6.5 (5.1-7.9)

Abbreviation: CI, confidence interval.  
<sup>a</sup>Stratified extrapolation approach. See Table 1 for numerator information.  
<sup>b</sup>Per 100,000 population; postcensus estimates from the US Bureau of the Census.

Hall, H. I. et al. JAMA 2008;300:520-529.

## HIV/AIDS Cases among Male Adolescents and Young Adults, by Transmission Category 2001–2005—33 States

Transmission category	13–19 years		20–24 years	
	N	%	N	%
Male-to-male sexual contact	2,346	77	8,402	75
Injection drug use (IDU)	212	7	866	8
Male-to-male sexual contact and IDU	122	4	593	5
High-risk heterosexual contact*	343	11	1,366	12
Other/not identified <sup>†</sup>	9	<1	31	<1
Total	3,031	100	11,259	100

Note. Data include persons with a diagnosis of HIV infection regardless of AIDS status at diagnosis. Data from 33 states with confidential name-based HIV infection reporting since at least 2001. Data have been adjusted for reporting delays and cases without risk factor information were proportionally redistributed.

\*Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

<sup>†</sup>Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.



Revised June 2007



### HIV/AIDS Cases among Female Adolescents and Young Adults, by Transmission Category 2001–2005—33 States

Transmission Category	13–19 years		20–24 years	
	N	%	N	%
Injection drug use	333	14	800	14
High-risk heterosexual contact*	2,086	85	4,740	85
Other/not Identified†	22	<1	47	<1
Total	2,441	100	5,586	100

Note. Data include persons with a diagnosis of HIV infection regardless of AIDS status at diagnosis. Data from 33 states with confidential name-based HIV infection reporting since at least 2001. Data have been adjusted for reporting delays and cases without risk factor information were proportionally redistributed.

\* Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

† Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.



Revised June 2007



### Youth & Technology



### Millennials

- Millennials (ages 13–24) **48 million**  
\*biggest consumers of technology and most technologically savvy
- Generation X or "Xers" (25–41) **60 million**
- Baby Boomers (42–60) **80 million**
- Matures (61–75) **30 million**

Why they use technology

- Youth don't love technology as much as they love what technology can do for them
  - communicate at all times from anywhere
  - express themselves
  - entertainment
- Say different forms of communication allow them to talk about more intimate subjects
- 88% of teens report that information and communication devices make their lives easier, compared with 69% of their parents

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Adolescents

- 93% of teens are online
- Avg. young person has
  - 94 numbers in their cell phone
  - 78 people on their IM list
  - 86 people in their social networking community
- Youth expect information on all platforms - mobile, computer & TV

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Adolescents

- Teens still prefer phone conversations and face-to-face interactions
- Teens will use any tool at their disposal to communicate with each other

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Use of technology varies by demographics

- Age
  - Tweens more likely to play online video games
- Gender
  - Boys are more likely to watch & upload videos
- Race/ethnicity
  - Hispanics, African Americans & Asians more likely than Whites to use a cell phone including texting, watching videos, & taking pictures

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What are they doing online?

- Instant messaging
- Sharing pictures
- Blogging
- Gaming
- Watching/making videos
- Social Networking
- Videos
- Making websites

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Instant message (IM)

- 68% send or receive instant messages
- Use it for
  - Gossiping (62%)
  - Making plans (57%)
  - Talking about opposite sex (57%)
  - Flirting (55%)
  - Talk about school/work (54%)
  - Talk about TV/music (52%)
- For Adolescents, email is the least popular form of communication

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Blogging

- 35% of girls & 20% of boys blog
  - One out of ten adults blog
- 55% read blogs (42% of Xers)
- 42% of teens on SNS also blog
  - 70% (7 out of 10) of SNS teens read blogs of others
  - 76% (3 out of 4) post comments to a blog on a SNS

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Videos & Photos

- 62% watch YouTube or other video streaming sites
- Older teen boys (15-17) more likely to watch videos on video sharing sites than younger teens. Also more likely to post videos online (21%) than girls (10%); even the most highly-wired girls.
- 89% post photos online

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Games

- 67% of teens & 70% of tweens play games online
- Types of games played varies
  - Casual games
  - Virtual games
  - Fantasy games

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Other things

- 39% share artistic creations online (artwork, photos, stories, etc)
- 33% create or work on websites/blogs for others (friends, schools, orgs)
- 27% maintain a personal website

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Social Networking Sites

- 55% of online teens have created their own profile on a social networking site
- 20% of online adults have profiles
- Girls use SNS more, more likely to use it to reinforce existing relationships
- Boys use it to meet new people & flirt

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Reasons they use SNS

- Stay in touch with friends
  - They see frequently (91%)
  - They rarely see in person (82%)
- To make plans (72%)
- To make new friends (49%)
- To flirt (17%)

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### What are they doing on SNS sites?

- 84% post messages to a friend's wall/page
- 82% send private messages to friends
- 76% post comments to friend's blogs
- 72% make plans with friends
- 61% send a bulletin or mass message to all friends in the system
- 33% wink, poke, give e-props to friends

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### Top 5 Social Networking Sites

- MySpace
- Facebook
- Bebo
- BlackPlanet
- Club Penguin

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### Peer influencers

- 71% of adolescents are watching/reading personal content created by others
- Most of websites viewed and viral-video content downloaded came from friends
- "Friends influence each other as much as marketers do."

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Take home assignment

Create a profile on  
MySpace or Facebook

Take home assignment

Create a profile on  
MySpace or Facebook

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FREE


Nokia camera phone  
w/ Bluetooth+Headset


Limited-time offer

Get both free >

2 year agreement (activation req'd)








powered by Google


[Home](#) | [Browse](#) | [Search](#) | [Invite](#) | [Apps](#) | [Mail](#) | [Blogs](#) | [Favorites](#) | [Forum](#) | [Groups](#) | [Events](#) | [MySpaceTV](#) | [Music](#) | [Comedy](#) | [Classifieds](#)

## Rachel



"You know what you like. And that makes you just like me."

Female,  
35 years old  
ATLANTA,  
GEORGIA  
United States

 **Online Now!**

Last Login:  
6/9/2008

**Rachel is in your extended network**

**Rachel's Latest Blog Entry** | [Subscribe to this Blog](#)

San Fran gets all the cool conferences ([view more](#))









We have a new puppy ([view more](#))

My new favorite website ([view more](#))

Let the count down begin ([view more](#))

View My: [Pics](#) | [Videos](#)

### Contacting Rachel

	<a href="#">Send Message</a>		<a href="#">Forward to Friend</a>
	<a href="#">Add to Friends</a>		<a href="#">Add to Favorites</a>
	<a href="#">IM / Call</a>		<a href="#">Block User</a>
	<a href="#">Add to Group</a>		<a href="#">Rank User</a>

If you had a million dollars for STD prevention, what would you do? ([view more](#))

[\[View All Blog Entries\]](#)

**Rachel's Blurbs**

**About me:**

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**facebook**

Profile edit Friends + Inbox » home account privacy logout

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**Search**

**Applications** edit

- Photos
- Groups
- Events
- Marketplace
- Where I've Been
- SuperPoker!
- Movies
- + more

**Jen's IQ is 112**

Winners you IQ? Take this PEO certified test to find out instantly.

More Ads / Advertise

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**Rachel Kachur**

What are you doing right now?

Sex:	Female
Interested In:	Women Men
Relationship Status:	Married
Looking For:	Friendships
Birthday:	October 23, 1972
Hometown:	Atlanta, GA
Political Views:	Very Liberal

View Photos of Me (20)  
View My Friends (99)  
Hug Rachel  
Dedicate A Music Video (NEW)

Happy Hour  
Send yourself a Piece of Flair  
Send Rachel a Flower  
Edit My Profile

Today

- Rachel and Laura Brightwell are now friends. 10:36am Comment X
- Rachel and Simeon M. Nelson are now friends. 7:16pm Comment X

Yesterday

- Rachel and Will Manning are now friends. 7:11pm Comment X
- Rachel commented on Jason Harding's photo. 10:41am X

Ah, this made me laugh. :P

Rachel wants to throw her computer through the fucking window. 10:41am Comment X

Rachel and Cady Berkel are now friends. 10:40am Comment X

▼ Friends 99 friends See All

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What about mobile phones?

- Texting
- Watching videos
- Taking pictures
- SNS
- Games
- Ordering stuff
- Dating
- Getting info

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Mobile Phone

- Who owns cell phones?
  - 73% of adults
  - 77% of young adults
  - 63% of teens
  - 35% of tweens
- 4 mobile phones sold per one personal computer. Cell phones have more reach.

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CDC/National Health Interview Survey

- ~1 out of 6 American homes (15.8%) had only wireless telephones
  - 10 million children living in wireless only houses
- More likely to be living in a wireless only household:
  - Adults living in poverty
  - Adults living in the South or Midwest
  - Hispanic Adults
  - African American Adults

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### Adolescents & mobile phones

- Keeps them connected with family & friends
  - \* More important than being cool
- Convenience of being able to communicate from anywhere

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### Text Messaging

- 75% of cell phone owners have text messaging capabilities
  - Of all users, only 35% use it
  - Among 13-17 yo, 72% use it
- Most used feature or most wanted feature
- On average, teens send 15-16 texts a day (455 texts/month)
- Cell phones becoming the new medium for viewing music videos

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### Improving Parent-child communications

- 68% of parents use texting to communicate with their children
- 56% of teens say they communicate more often with their parents since they began text messaging
- 53% thinks it has improved their relationship with their parents
- 51% of parents agree

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If you had to choose between your cell phone and...

- 1/3 would give up listening to the radio, playing video games or going to the mall
- ~1/4 would give up their MP3 players
- 1 in 5 would give up TV

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Other uses

- Accessing SNS
  - 63% of US web traffic on mobile phones
- Connecting to the Internet
- Watching videos
- Taking pictures
- Accessing information &/or goods
- Gaming
- Dating

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Meet Moi

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**Take Home Assignment:  
Text Zip Code to KnowIt**

- CDC/Kaiser Family Foundation effort to increase HIV testing
- Text zip code to “KnowIt” (566948) to get nearest HIV testing location
- Text messaging campaign linked to the HIVtest.org website




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**Technology & Prevention**




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**Social Networking – For the people**




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# Science Networking for Professionals

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The screenshot shows the San Francisco City Clinic website. The header includes the clinic's name and a navigation bar with links like 'HOME', 'ABOUT US', 'CONTACT US', 'OUR SERVICES', 'SYMPTOM TRACKER', 'TESTING', 'FAQ', and 'DONATE'. The 'TESTING' link is highlighted. Below the header, there's a section titled 'WELCOME' with a sub-header 'For San Francisco residents, getting tested for syphilis is as easy as 1-2-3.' followed by a numbered list: 1. Get Ready (Download and print lab info, Take the trip to local lab), 2. Get Tested (Keep your appointment, Follow up), and 3. Get Results (Business 101, 807% success rate). On the right, there are three boxes: 'SYMPTOM TRACKER', 'YOUR PARTNERS', and 'AVOIDA', each with a brief description and a 'VIEW MORE' link. At the bottom, there's a 'GET SCHEDULED NOW' button and a 'TEST QUESTION TEST' section.

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# Online prescriptions

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## Ordering testing kits

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The screenshot shows the inSPOT website interface. At the top, the navigation bar includes links for 'ABOUT THIS SITE', 'COMMUNITY GUIDELINES', 'FAQ', and 'CONTACT US'. The main content area is titled 'VISIT A SITE, NEAR YOU' and includes a call to action: 'TELL them if you've been exposed to an STD.' and a link to 'FIND local testing resources'. Below this, there are three columns of location-based links:

- US: Cities**
  - San Francisco
  - Chicago
  - Los Angeles
  - New York City
  - Philadelphia
  - Portland
  - Seattle
  - Washington, DC
- US: States**
  - California
  - Colorado
  - Florida
  - Idaho
  - Indiana
  - Massachusetts
  - Minnesota
  - Wisconsin
- International**
  - Taiwan
  - Romania

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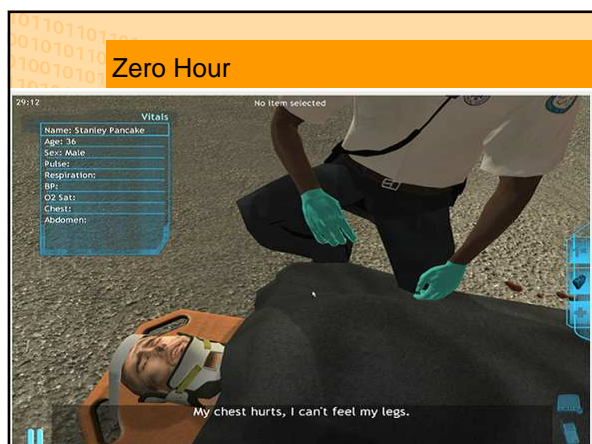
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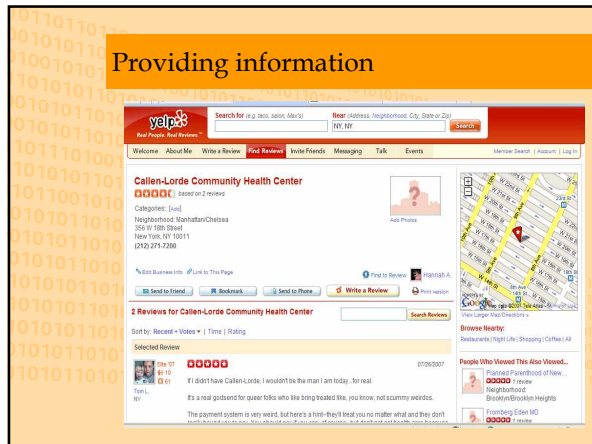
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## Providing information




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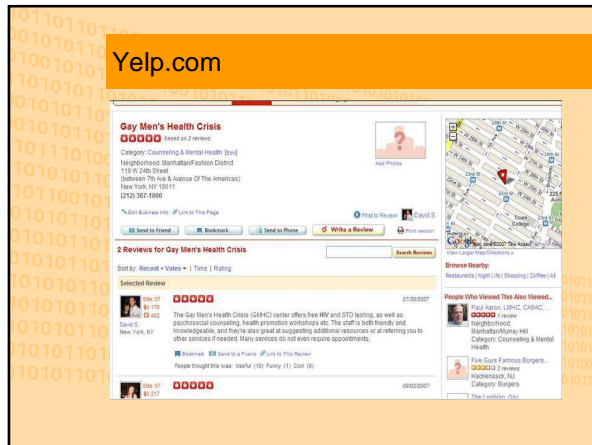
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## Yelp.com




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## Raising awareness




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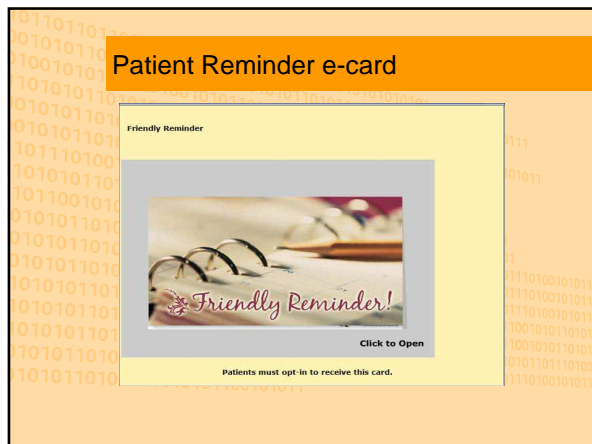
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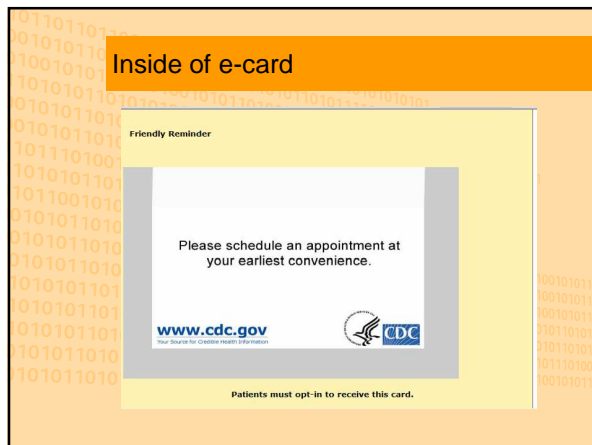
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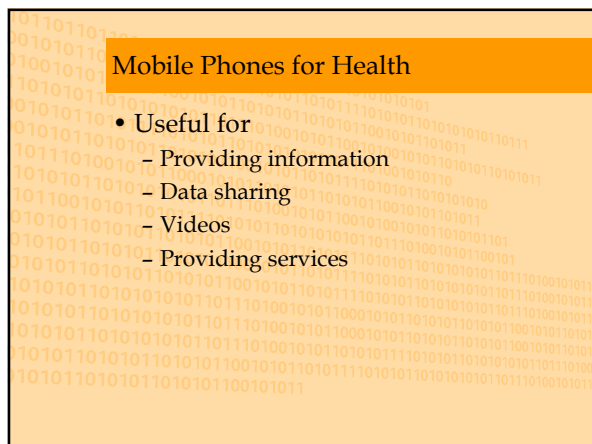
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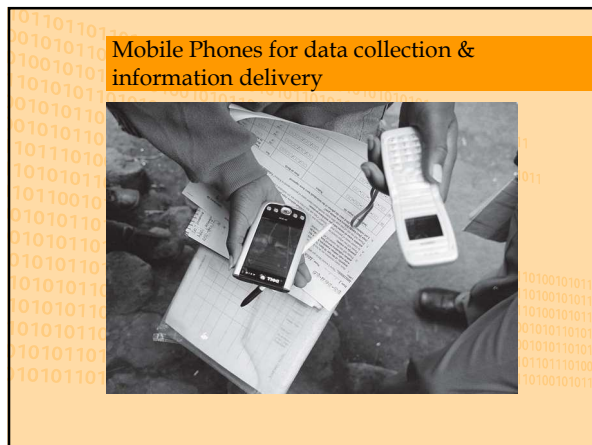
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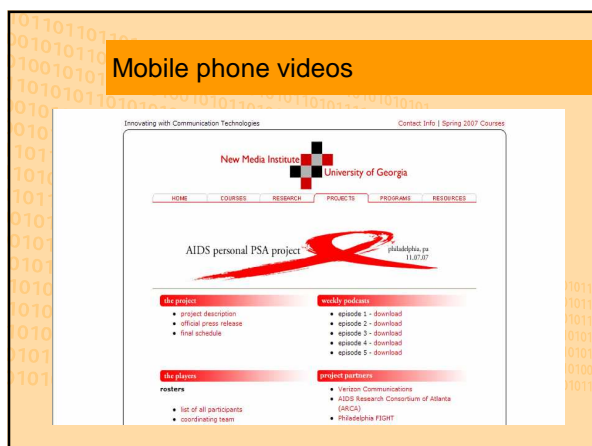
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Mobile Phones for providing services

- Appointment reminders
- Test results
- Diagnosis
- Medication adherence
- Saves staff time, improves health outcomes, meets the public where they are

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Expectations of Teens (& the public)

- Expect people and organizations to be online & easy to find
- Expect information to be online, available and up to date
- People influencing people - Other people's opinions are just as important as brands
- Want information in every medium

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Marketing - our competition

- The biggest budget increases will be seen in online marketing, with 79.1% of marketers planning to boost their online budgets next year, up from last year, when 75.6% of marketers said they planned to increase their online budgets in 2007.

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### The iPhone – sex toy AND prevention tool?



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### Contact Information

Rachel Kachur  
rkachur@cdc.gov  
(404) 639-2387

Or on [STDPreventiononline.org](http://STDPreventiononline.org)

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### Four Mindsets about Promoting Youth's Sexual Health Online (and how to avoid their traps)

Dan Wohlfeiler  
STD Control Branch  
California Dept. of Public Health  
August 21, 2008

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## Thanks

- Julia Marcus, CA STD Control Branch
- Jon Ellen, Johns Hopkins University
- John Potterat
- Chris O'Leary (1973-2008), LA STD Program
- The managers of the very websites who were gracious enough to let themselves be recognized as not being big enough to solve the problem of STD/HIV transmission among people meeting partners online

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## The four mindsets

- Youth will prioritize the websites we create to promote sexual health.
- We can use off-line strategies for STD/HIV prevention online.
- Youth's risk for HIV/STD is based on their individual characteristics.
- We can define the problem as the lack of the solution we already have in mind.

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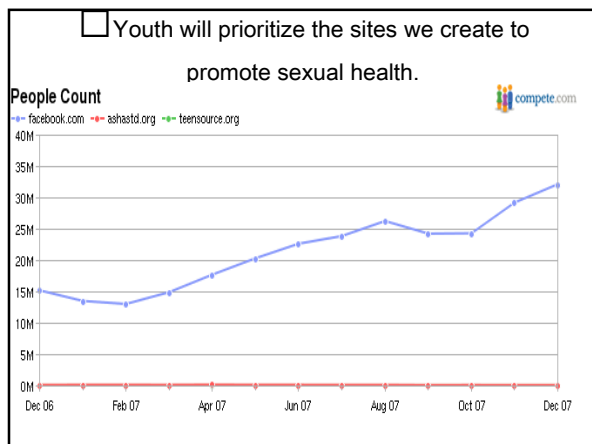
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### How many people visited in December, 2007?

Facebook	32,097,588
CDC.Gov	2,262,122
Manhunt	398,201
Ashastd.org	130,000*
Teensource.org	58,000*
Siecus.org	120,000*
Hivtest.org	28,228

Even if Compete is insensitive to low numbers, it's not off by 1000-fold.

*\*numbers provided by website managers*

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### We can use off-line strategies online.

- Internet outreach
  - We do it, but there are few data to support its effectiveness
  - To be effective, needs to reach:
    - The right individuals
    - Enough individuals
    - With something effective enough
  - Costs can be substantial
    - Four per hour to do a quality intervention with basic risk assessment and recruitment to other interventions

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### Reasons cited for doing outreach online

- We can answer questions like “How safe is oral sex?”
- We can provide links to testing.
- We can provide links to other services.

*All of these can be accomplished by googling or by providing links on the sites themselves.*

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The one justification for doing outreach that we can't automate

Lend an empathic ear.

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### Alternatives:

- Go where they are.
- Improve links.
- Encourage internet sites to do periodic reminders to get tested, either per number of potential partners pages viewed, time, or upon renewal of membership.

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Youth's risk is based on their individual psychological characteristics.

To some extent, that's true.

But risk for youth also depends on many factors including:

Age of partners

Patterns of relationships and network structure.



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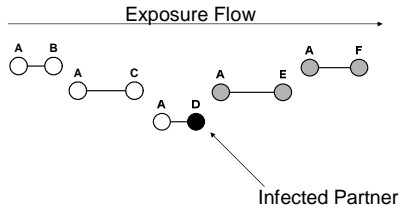
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## Serial Monogamy



After A is exposed to infected partner D, three are potentially infected.

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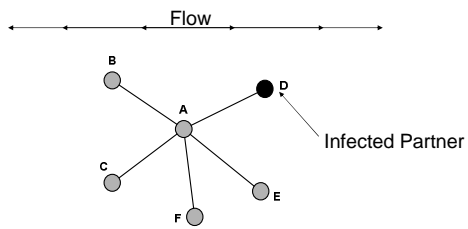
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## Concurrency



Given the same time period: After A is exposed to infected partner D, five are potentially infected.  
Concurrency **facilitates more transmission than serial monogamy.**

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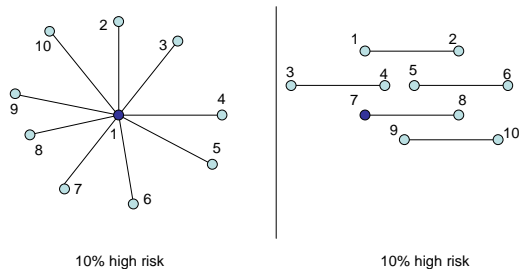
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If surveys tell us that 10% of people are having unsafe sex, what does that tell us?




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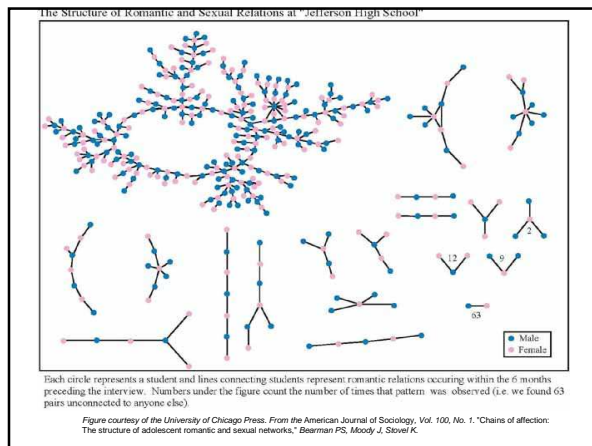
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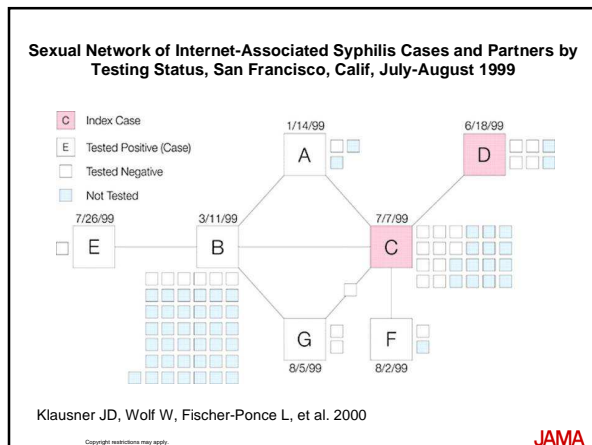
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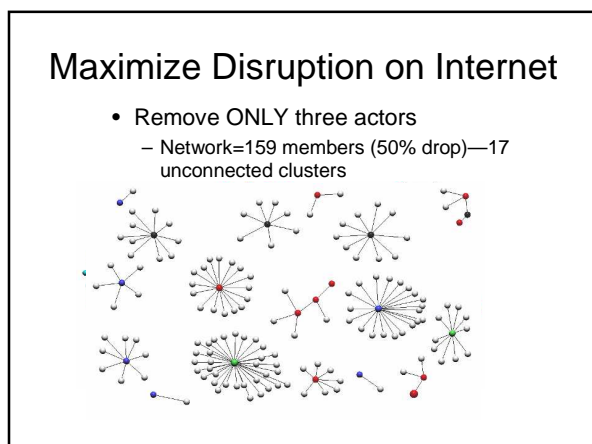
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### More alternatives:

- Let the internet help people make more informed choices.
- Encourage sites which cater specifically to lower risk activities

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“The problem is the lack of solution we already have in mind.”

“The problem is the lack of ....”

- community
- outreach
- non-alcoholic venues
- counseling

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### Solution:

- Organize, don't provide.
- Same skills we have in counseling we can apply in leveraging others' resources including internet company owners and others
  - Identify benefits
  - Identify where they are
  - Come up with feasible steps

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For questions, comments,  
suggestions, criticism:

Dan.wohlfeiler@cdph.ca.gov

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## Using Technology in Adolescent STI Prevention

Kees Rietmeijer, MD, PhD

Internet and STD Center of Excellence  
Denver Public Health Department

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## Why Do We Care?

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## Communication Technology and STI among Adolescents:

### What's the Risk?

**Table 1.** Young Persons (Age 18–24 Years) Reporting Sex With Internet Partners (SIPs; N = 495) and Young Persons With No Internet Partners (NIPs; N = 739) to SexQuiz

Measure	SIPs N = 495 Mean (SD) or % yes	NIPs N = 739 Mean (SD) or % yes	p-value
<b>Demographics</b>			
Male	66.7	56.8	<0.001
White	76.3	74.4	0.18
Black	5.1	5.3	
Hispanic	6.1	6.4	0.88
Age at first sex (yrs)	16.6 (2.8)	17.1 (2.8)	0.003
Tested for HIV	55.3	35.2	<0.001
Tested for STD	48.5	36.3	<0.001
Had an STD	10.4	6.2	0.02

McFarlane et al. J Adol Health 2002;31:11.

**Table 1.** Young Persons (Age 18–24 Years) Reporting Sex With Internet Partners (SIPs; N = 495) and Young Persons With No Internet Partners (NIPs; N = 739) to SexQuiz

Measure	SIPs N = 495 Mean (SD) or % yes	NIPs N = 739 Mean (SD) or % yes	p-value
<b>Non-Internet partners</b>			
Lifetime partners	14.6 (47.1)	5.8 (11.1)	<0.001
12-month partners	4.3 (16.2)	1.7 (1.5)	<0.001
Partner sex			<0.001
Same sex	30.8	5.7	
Opposite sex	53.3	86.7	
Both sexes	15.9	7.6	
Oral sex—12 months	87.6	91.1	<0.001
Anal sex—12 months	45.9	24.1	<0.001
Vaginal sex—12 months	60.0	87.8	<0.001
Condom/barrier last oral sex	3.3	4.2	0.32
Condom last anal/ vaginal sex	46.6	38.1	<0.001
Drunk/high during sex	57.6	60.5	0.07
Discuss HIV with partners	60.5	60.3	0.93
Discuss STD with partners	62.3	59.7	0.66
Prevention chat room	31.5	26.1	0.04
Prevention e-mail	49.2	43.6	0.15
Meet partners in bar	14.2	8.6	0.009
Meet partners at work/ school	22.3	30.9	0.006
Meet partners in "public" environment	8.0	5.8	0.02

McFarlane et al. J Adol Health 2002;31:11.

	MSM	MSW	Women
N	1847	6453	4703
Sex with Internet Partner	809 (43.8%)	356 (5.5%)	154 (3.2%)
Odds Ratio (95% C.I.)	0.92 (0.70-1.20)	0.59 (0.42-0.81)	0.57 (0.31-1.01)



Denver  
NEUROLOGICAL CLINIC

- 1. Adjunct to Clinical Services

The screenshot displays the HealthDoc application interface. At the top, there is a menu bar with options: File, Edit, View, Favorites, Tools, Help. Below this is a header bar with the text "HealthDoc" and "Person information".

The main content area is divided into two sections. The top section displays patient information:
 

- Patient Name: 11199
- DOB: 1982-05-21
- Gender: Male
- Mod Plan #: 11199
- County: 11199

 Below this information, it says "Registered Rpt. Comments, Date on 2009-05-21 12:00 AM".

The bottom section is titled "Person #: 11199" and "DOB: 11199". It contains several fields for patient information:
 

- Name: Last Name, First Name, Middle Name (all empty)
- DOB: 11199, 11199, 11199
- Gender: Male (dropdown menu)
- Country of Birth: 11199
- Marital Status: 11199
- Language: 11199
- Other Country: 11199
- State: 11199

 Below these fields, it says "Registered Rpt. Comments, Date on 2009-05-21 12:00 AM".

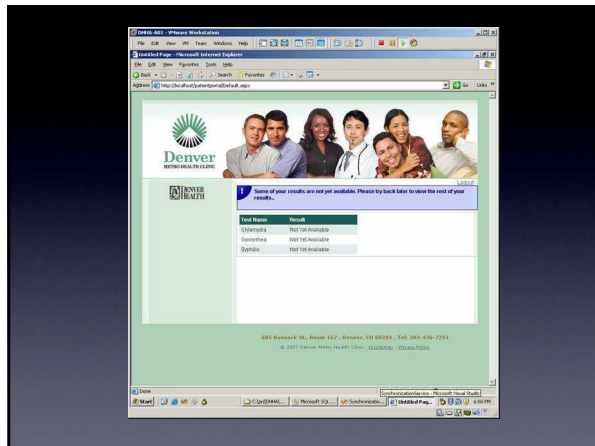
At the bottom of the interface, there are two buttons: "Save" and "Cancel".

Overlaid on the bottom half of the screenshot is a large text box with the following content:
 

Includes:

- Consent to text messaging
- ID and Pass code to obtain online results






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## Cell Phone & Text Messaging Use Among STD Clinic Patients Clinic Survey Results

Do you use a cell phone?	84.7%
Do you use text messaging on your cell phone?	90.2%
Is it OK to contact you via text message?	93.5%

Presented at ISSTD, 2007

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## Text Messaging Projects Denver Metro Health Clinic

- Project 1

Send text message to those testing positive for gonorrhea or chlamydia to call the clinic to receive their results (if they haven't called back after 7 days)

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## Text Messaging Projects Denver Metro Health Clinic

- Project 2

Send text message to those treated for gonorrhea or chlamydia to return to the clinic for re-testing after 3 months

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## Using Technology for STI Services and Prevention

- 2. Stand Alone Clinical Services

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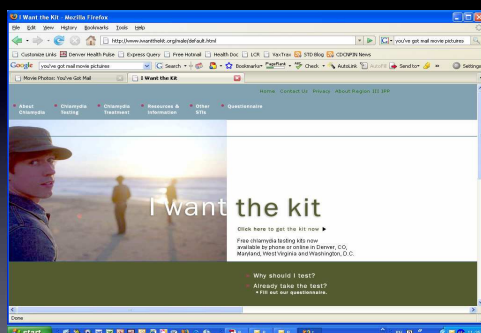
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## HIV/STI Testing



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## Using Technology for STI Services and Prevention

- 3. Partner Services

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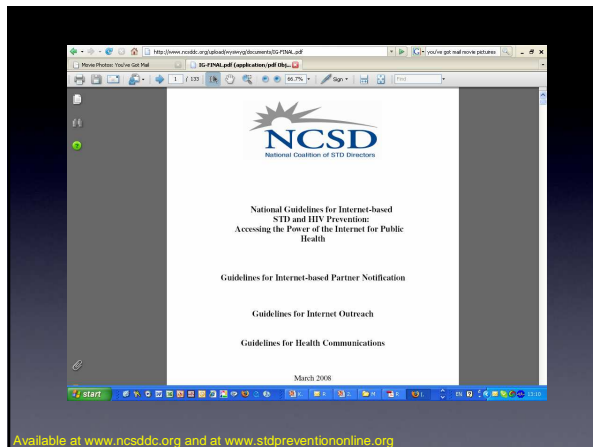
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Available at [www.ncsddc.org](http://www.ncsddc.org) and at [www.stdpreventiononline.org](http://www.stdpreventiononline.org)

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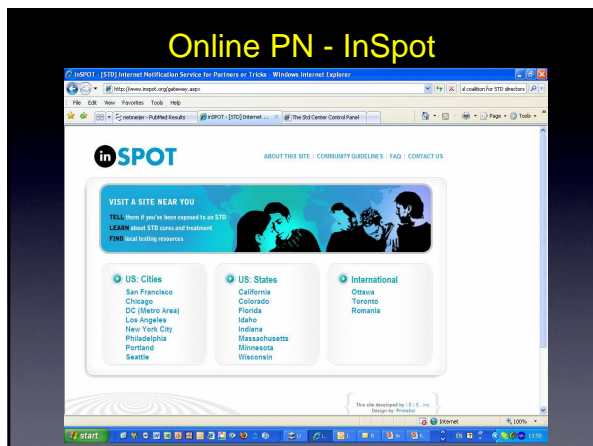
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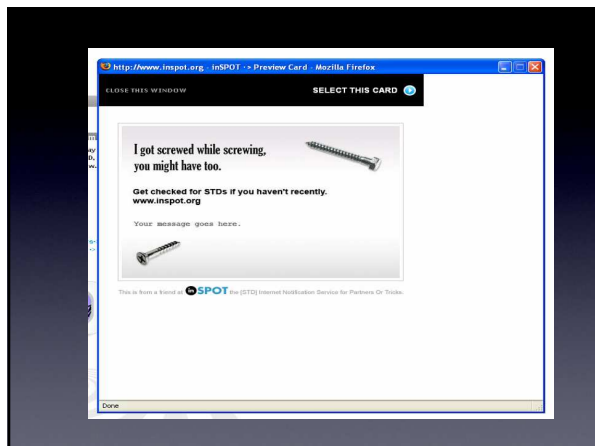
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## Using Technology for STI Services and Prevention

- 4. STI Prevention

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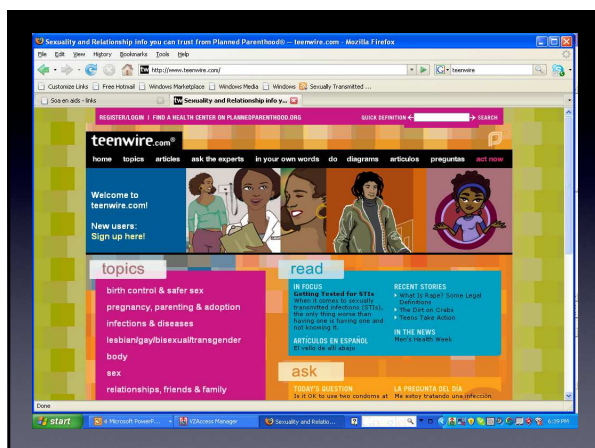
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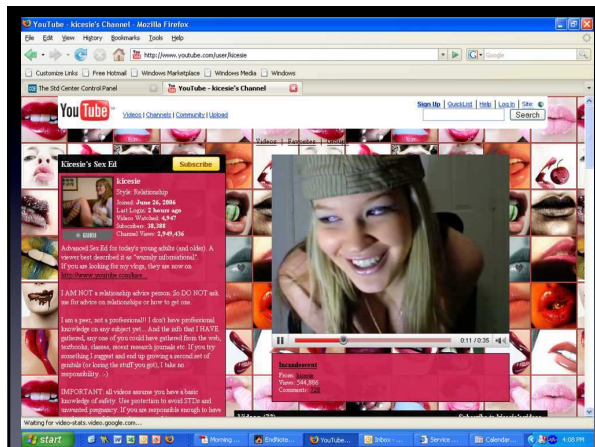
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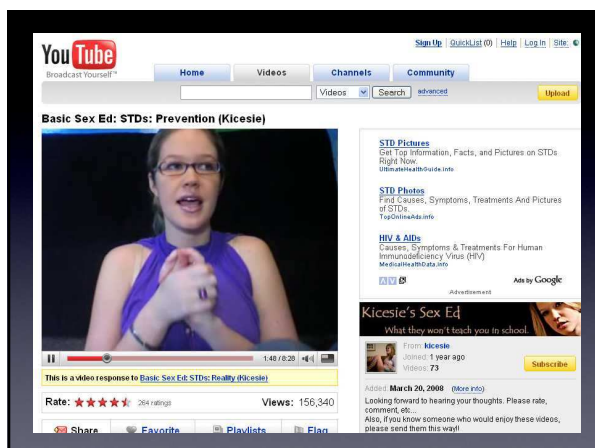
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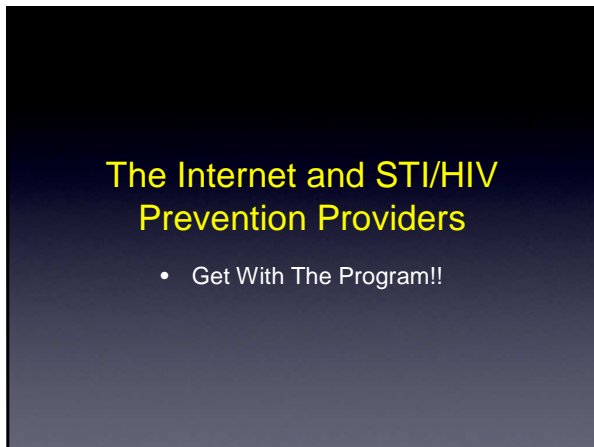
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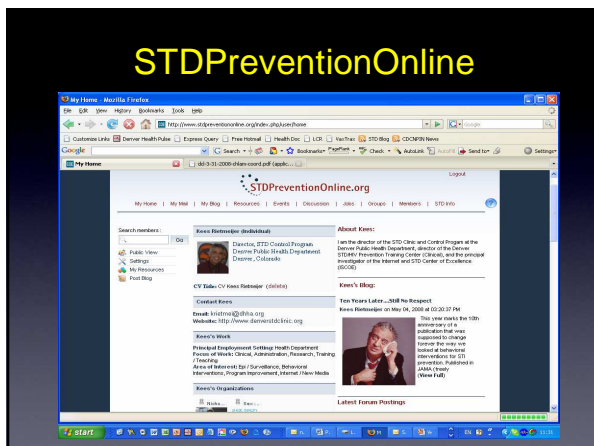
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## Questions & Answers

Type your question into the "Questions" box located on the lower left side of your screen.

Be sure to click "send" to submit your question.

or

Press \*1 on your touch-tone phone to ask a live question.

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## Thank you for your participation!



Please take a moment to submit the online evaluation form for this session. Click on the "Evaluation" link to the left of the slide.

Presented by:



**NACCHO**  
National Association of County & City Health Officials

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